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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,898	07/21/2003	Douglas B. Alston	030225	7643

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EXAMINER	
ADDY, ANTHONY S	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,898	ALSTON, DOUGLAS B.	
	Examiner	Art Unit	
	Anthony S. Addy	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *21 and 22* is/are allowed.

6)☒ Claim(s) *1-20 and 23-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on August 24, 2006. New **claims 21-33** have been added. **Claims** 1-33 are now pending in the present application.

Response to Arguments

2. Applicant's arguments with respect to **claims 21-33** have been considered but are moot in view of the new ground(s) of rejection. Arguments are directed to newly added limitations and the new ground(s) of rejection based on the newly added limitations follow below.

3. Applicant's arguments with respect to **claims 1-20** filed on August 24, 2006 have been fully considered but they are not persuasive.

In response to applicant's argument that, "Neither Hou nor Dacosta teaches or suggest receiving a first parameter from a communications device, and measured by said communication device, that is in communication with a computing device (page 7, fourth paragraph and page 8, second and third paragraphs of the response)," by arguing that, the feedback of Dacosta appears to be a method wherein the server measures transmissions from the clients to determine a SNR parameter, and thus, this feedback cannot be considered to be a parameter received from, and measured by, the device (see page 8, second paragraph of the response), examiner respectfully disagrees and maintains that Dacosta meets the limitations as claimed. Examiner reiterates that Dacosta teaches a system, apparatus and method for dynamically

allocating wireless channels in a wireless network, wherein a server in communication with the clients estimates acceptable data rates and throughputs for given power levels; and teaches a number of different ways to estimate acceptable data rates and throughputs for given power levels for each client (see abstract and p. 5 [0046 & 0048]). According to Dacosta, for example, a probing method may be used wherein actual data packets may be sent to each of the clients from the server at different transmit power levels to estimate acceptable data rates and throughputs for given power levels; and ***in another method***, feedback may be measured from clients to indicate the bit error rate and signal-to-noise ratio (SNR) (see p. 5 [0047-0048]), which meets the claimed limitations of "a parameter received from and measured by the device that is in communication with the network."

In response to applicant's argument that the references fail to show certain features of applicant's invention (see page 8, third paragraph of the response), it is noted that the features upon which applicant relies (i.e., receiving a first parameter from a communications device, and ***measured*** by said communication device, that is in communication with a computing device) are not recited in rejected claim 20. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that, "Hou does not teach communicating the relative network throughput to the communication device (page 9, second and third paragraphs of the response)," examiner respectfully disagrees and maintains that Hou

meets the claimed limitations, since Hou explicitly teaches the performance metrics generated by the metric servers are provided to a user, such as a system administrator for further analysis and examination; and the users of the performance metrics generation system are illustrated in Fig. 1 as client systems 11A-11F communicating directly with the metric servers (see col. 5, lines 38-43 and Fig. 1).

Furthermore it appears applicant is arguing against the references individually, however it has been held that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In view of the above, the 35 U.S.C. 103(a) rejections using Hou and Dacosta with regard to claims 1-20 are proper and are maintained as repeated below. The rejections are made **FINAL**.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 2, 3, 4, 9, 11-15, 18-20 and 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hou et al., U.S. Patent Number 6,901,051 (hereinafter Hou)** and further in view of **Dacosta et al., U.S. Publication Number 2004/0192322 A1 (hereinafter Dacosta)**.

Regarding claim 1, Hou teaches a system, comprising: a service measurement database having stored therein network service measurement data relating to a network (see col. 4, lines 4-23, col. 7, lines 59-67 and Fig. 1; where metric generators 15A-15C reads on a service measurement database, since Hou discloses the metric generators are able to generate and store network performance metrics); and a server in communication with the service measurement database (see col. 4, lines 4-48, col. 7, line 59 through col. 8, line 3 and Fig. 1; shows metric servers 17B-17C in communication with metric generators 15A-15C) , wherein the server estimates a data throughput for a device that is in communication with the network based on the network service measurement data (see col. 4, lines 4-55, col. 4, line 65 through col. 5, line 3, col. 9, lines 8-16, col. 11, line 47 through col. 12, line 3 and Fig. 1 [i.e. the limitation "the server estimates a data throughput for a device that is in communication with the network based on the network service measurement data" is met by the teaching of Hou that the performance measurements and generation are performed on the server side using network performance metrics stored in the metric generators]).

Hou fails to explicitly teach the server estimates the data throughput for a device using a parameter received from, and measured by, the device that is in communication with the network.

In an analogous field of endeavor, Dacosta teaches a system, apparatus and method for dynamically allocating wireless channels in a wireless network, wherein a server in communication with the clients estimates acceptable data rates and throughputs for given power levels (see abstract and p. 5 [0048]). According to

Dacosta, feedback may be measured from clients to indicate the bit error rate and signal-to-noise ratio (SNR) from previous data packets; and because the server knows the transmit power of the previous packet, the server can determine the relationship between the clients SNR and transmit power for the current propagation path of data packets between the server and client (see p. 5 [0048] [i.e. the feedback measured from clients to indicate the bit error rate and ***signal-to-noise ratio (SNR)*** reads on the claimed limitations of "a parameter received from, and measured by, the device that is in communication with the network]). Dacosta further teaches, using the relationship of the clients SNR and transmit power for the current propagation path of data packets between the server and client, the server estimates acceptable data rates and ***throughputs*** for given power levels (see p. 5 [0048] [i.e. the server using the relationship of the ***clients SNR*** and transmit power for the current propagation path of data packets between the server and client to ***estimate*** acceptable data rates and ***throughputs*** for given power levels, reads on the limitation "the server estimates the data throughput for a device using a parameter received from, and measured by, the device").

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of a server using a clients SNR to estimate a throughput of Dacosta, in the system of Hou, in order to allocate client devices that receive data at substantially different data rates to different wireless channels and client devices that receive data at substantially similar data rates to the same wireless

channel to optimize the total system utility of the network as taught by Dacosta (see p. 1 [0005-0006]).

Regarding claim 2, Hou in view of Dacosta teaches all the limitations of claim 1. In addition, Hou teaches a system, wherein the server includes an application server (see col. 3, lines 65-67).

Regarding claim 3, Hou in view of Dacosta teaches all the limitations of claim 1. In addition, Hou teaches a system, wherein the network is one of a wireless network, a wireline network, the Internet, an intranet (see col. 3, lines 16-31).

Regarding claim 4, Hou in view of Dacosta teaches all the limitations of claim 1. In addition, Hou teaches a system, wherein the device includes one of a personal computer and a handheld computing device (see col. 3, lines 42-64 and Fig. 1).

Regarding claim 9, Hou in view of Dacosta teaches all the limitations of claim 1. In addition, Hou teaches a system, wherein the server is in communication with a service center (see col. 5, lines 38-47).

Regarding claims 11 and 20, Hou teaches an apparatus and a method of communicating a network relative network throughput to a user device (see col. 5, lines 38-43, col. 4, lines 48-55 and Fig. 1; shows client systems in communication with metric servers 17B-17C [i.e. reads on a communication device that is in communication with a computing device] and including metric generators 15A-15C [i.e. reads on a service measurement database, since Hou discloses the metric generators are able to generate and store network performance metrics]), comprising: receiving a second parameter from a service measurement database (see col. 4, lines 4-48, col. 7, line 59 through col.

8, line 3); calculating the relative network throughput based on the second parameter (see col. 4, lines 4-55, col. 4, line 65 through col. 5, line 3, col. 9, lines 8-16, col. 11, line 47 through col. 12, line 3 and Fig. 1 [i.e. the limitation "calculating the relative network throughput based on the second parameter" is met by the teaching of Hou that the performance measurements and generation are performed on the server side using network performance metrics stored in the metric generators [i.e. reads on a second parameter from a service measurement database]); and communicating the relative network throughput to the communications device (see col. 5, lines 38-43).

Hou fails to explicitly teach receiving a first parameter from a communications device, and measured by the communications device, that is in communication with a computing device and calculating the relative network throughput based on the first parameter.

In an analogous field of endeavor, Dacosta teaches a system, apparatus and method for dynamically allocating wireless channels in a wireless network, wherein a server in communication with the clients estimates acceptable data rates and throughputs for given power levels (see abstract and p. 5 [0048]). According to Dacosta, feedback may be measured from clients to indicate the bit error rate and signal-to-noise ratio (SNR) from previous data packets; and because the server knows the transmit power of the previous packet, the server can determine the relationship between the clients SNR and transmit power for the current propagation path of data packets between the server and client (see p. 5 [0048] [i.e. the feedback measured from clients to indicate the bit error rate and ***signal-to-noise ratio (SNR)*** reads on the

claimed limitations of "receiving a first parameter from a communications device, and measured by the communications device, that is in communication with a computing device]). Dacosta further teaches, using the relationship of the clients SNR and transmit power for the current propagation path of data packets between the server and client, the server estimates acceptable data rates and ***throughputs*** for given power levels (see p. 5 [0048] [i.e. the server using the relationship of the ***clients SNR*** and transmit power for the current propagation path of data packets between the server and client to ***estimate*** acceptable data rates and ***throughputs*** for given power levels, reads on the limitation "calculating the relative network throughput based on the first parameter").

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of a server using a clients SNR to estimate a throughput of Dacosta, in the system of Hou, in order to allocate client devices that receive data at substantially different data rates to different wireless channels and client devices that receive data at substantially similar data rates to the same wireless channel to optimize the total system utility of the network as taught by Dacosta (see p. 1 [0005-0006]).

Regarding claim 12, Hou in view of Dacosta teaches all the limitations of claim 11. Dacosta further teaches, wherein receiving the first parameter includes receiving the first parameter via a network (see p. 2 [0021-0022], p. 5 [0048] and Fig. 1).

Regarding claim 13, Hou in view of Dacosta teaches all the limitations of claim 11. Dacosta further teaches, wherein receiving the first parameter via a network

includes receiving the first parameter via the Internet (see p. 2 [0021-0022], p. 5 [0048] and Fig. 1).

Regarding claims 14, 23, 24, 25 and 26, Hou in view of Dacosta teaches all the limitations of claim 11. Dacosta further teaches, wherein receiving a first parameter includes a step of receiving a signal-to-interference ratio (SIR) (see p. 5 [0048]), but fails to explicitly teach wherein receiving a first parameter includes receiving a primary receiving site, receiving a sector, receiving a carrier and a received signal strength (RSS). However, one of ordinary skill in the art further recognizes that such parameters are quality indicators of a communication network, and as such it would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Hou and Dacosta to include such quality indicators to optimize the total system utility of the network, in order to allocate client devices that receive data at substantially different data rates to different wireless channels and client devices that receive data at substantially similar data rates to the same wireless channel to optimize the total system utility of the network as taught by Dacosta (see p. 1 [0005-0006]).

Regarding claims 15, 27, 28 and 29, Hou in view of Dacosta teaches all the limitations of claim 11. In addition, Hou teaches a method, wherein receiving a second parameter includes receiving an indication of total voice traffic/sector/carrier, an indication of total data traffic/sector/carrier (see col. 4, lines 1-47), but fails to explicitly teach wherein receiving a second parameter includes a step of receiving an indication of origination failures, and an indication of dropped calls. However, one of ordinary skill in the art further recognizes that such parameters are quality indicators of a

communication network, and since Hou teaches generating performance metrics such as a total network traffic (see col. 4, lines 24-47 and col. 9, lines 8-16), it would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Hou and Dacosta to include such quality indicators to optimize the total system utility of the network, in order to generate performance metrics of a network to estimate network throughput, goodput, packet loss rate e.t.c. to optimize the total system utility of the network as taught by Hou (see col. 4, lines 1-47 and col. 9, lines 8-16).

Regarding claim 18, Hou in view of Dacosta teaches all the limitations of claim 11. In addition, Hou teaches a method, wherein calculating the network throughput includes calculating a forward link relative throughput (see col. 4, line 49 through col. 5, line 18).

Regarding claim 19, Hou in view of Dacosta teaches all the limitations of claim 11. In addition, Hou teaches a method, wherein calculating the network throughput includes calculating the network throughput as one of a numerical value and a range of numerical values (see col. 4, line 49 through col. 5, line 18).

6. Claims 5, 6, 7, 8, 10, 16, 17 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hou et al., U.S. Patent Number 6,901,051 (hereinafter Hou)** and **Dacosta et al., U.S. Publication Number 2004/0192322 A1 (hereinafter Dacosta)** as applied to claims 1, 11 and 20 above, and further in view of **Senapati et al., U.S. Patent Number 7,047,304 (hereinafter Senapati)**.

Regarding claims 5, 6, 7, 8, 10, 16, 17, 30, 31, 32 and 33, Hou in view of Dacosta teaches all the limitations of claims 1, 11 and 20. The combination of Hou and Dacosta fails to explicitly teach a system and method, wherein the server communicates the throughput of the network to a modem and wherein the modem includes a display area that includes three lights, wherein one of said three lights is capable of displaying the color red to indicate a low throughput, one of said three lights is capable of displaying the color yellow to indicate a medium throughput and one of said three lights is capable of displaying the color green for high throughput of the network.

However, the use a modem to connect a client device to communicate with a network and for a modem to include a display area that is configured to display an indication of the throughput of the network as taught for example by Senapati.

Senapati teaches a system and method for provisioning broadband service, wherein a modem connects a client computer to communicate with a network (see abstract, col. 5, line 55 through col. 6, line 5 and Fig. 1; shows a modem 104 connecting client computers 102 (1)....102(N) to ATM network 110). According to Senapati, the modem includes a display area including lights and teaches the modem will indicate an error, such as by lighting a red light to display an error associated with the network (see col. 10, lines 13-15 and col. 11, lines 11-15).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Hou and Dacosta with the teachings of Senapati, to include a system and method, wherein the server communicates the throughput of the network to a modem and wherein the modem includes a display area that includes three lights,

wherein one of said three lights is capable of displaying the color red to indicate a low throughput, one of said three lights is capable of displaying the color yellow to indicate a medium throughput and one of said three lights is capable of displaying the color green for high throughput of the network, in order to indicate an error, such as by lighting a red light to display an error associated with the network, so that a user of a communication device communicating with the network can adapt their interactions with the network accordingly as per the teachings of Senapati (see col. 10, lines 13-15 and col. 11, lines 11-15).

Allowable Subject Matter

7. Claims 21-22 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shafi, U.S. Patent Number 5,050,041 discloses modem mountable in wall of a computer housing with readily accessible, on/off switch, indicator means and internal switch connecting either modem or an auxiliary serial port to an I/O port.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S. Addy whose telephone number is 571-272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.S.A

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